With a pack of playing cards, I used to run to my grandparents along with other children of my village. I vividly remember, how we, the children used to enjoy the hot summer days, playing card games beneath the thatched house. Over the last three decades, people have gone in for concrete buildings in place of earthen and thatched houses – natural shelters that kept the environmental balance intact.

Why is the thatched house of paramount importance? Our forefathers adopted this technology without apparently understanding its scientific reason. The idea is quite simple. The house is made of four bamboo walls supported by four wooden poles. The walls are plastered and smeared with mud. The roof consists of skillfully woven bamboo nets on which a thick layer of straw is arranged.

The straws are derived from the dried stems of rice plants. The straw is hollow and cylindrical in shape. Air is trapped in the cylindrical space. There are thousands of such straws on the roof. As a result, these individual air pipes join together to form an insulating layer between the room and the atmosphere. So, thatched roofs absorb heat keeping the atmosphere cool – a natural air conditioner without any Chlorofluorocarbon and the consequent threat of global warming.

Here is a rough calculation. If a single thatched house absorbs 100 calories of heat per day, then a village of 100 such houses would contribute an amount of 10 kilocalories. This is a very significant amount, especially as we talk of rise in global temperature. In this context, it is no surprise that climatic parameters have produced negative results.

People are on the move, from traditional values to modern day use-and-throw lifestyle. Just like my village, other villages too are suffering this catastrophic transition. Within the next few years, the idea of a traditional house of thatched roof and mud wall is likely to be wiped out of human memory. Of course, there are so many reasons for this. One of them is safety and longevity. The other is scarcity of straw.

As the population continues to explode, the demand for food grows immensely. The solution is hybrid varieties of rice. Mayarakantha, Akashamalli, Kusumukunda, Magura, Kainchaphulla, Maipala, Kadalichampa, Kanthamadhua, Geleigeti, to name a few, are the indigenous rice varieties which are feared extinct. These plants grow up to a height of five feet and more. The straw derived from them is long and strong enough to meet the purpose of house-hold thatching. But, today’s hybrid plants are dwarf, producing shorter and weaker straws not suitable for thatching.

Another reason is that the traditional rice is grown with the natural fertility of soil, enriched by cattle dung and forest sediments. Due to this reason, the nutritional value of the rice is very high. And at the same time, soil, water and air remain pollution free.

There also exists a special relationship between the crop and the domesticated animals. The rice crop produces fodder for the cattle. In return, the cattle provide natural fertilizer in the form of dung and urine. The cattle are completely devoted to agricultural activities, from drawing plough to pulling cart. This traditional way of life is what we can call “green technology”.

With the advent of modern technology, the long existing pro-environmental life style is seriously disrupted. First, tractors and other machines took the place of cattle in agriculture. While at work, these vehicles produce green-house gases. Another side effect is that domestic animals become useless. Soon the cattle sheds become empty. This is why procurement of natural fertilizer has declined sharply and with it the soil fertility. Chemical fertilizers and pesticides further degrade the natural fertility of soil. No wonder, weeds outgrow the rice crop.

Yet another key indicator of soil fertility is the leguminous crop. After harvesting the rice crop, legumes are grown in the field as part of the Rabi season. The production of legumes has gone down to less than 10% over the last generation. It is an alarming situation.

Finally, during the growing season, a unique aquatic ecosystem is created in the paddy field. The standing crop becomes a home for aquatic and amphibian species such as small fish, crabs, earthworm, snakes, snails and many other useful micro-organisms. It draws birds like crane, kingfisher, kites and inevitably forms an integral part of the natural beauty of village life. This seasonal biological reserve has been completely disturbed by the use of chemical substances.

Our grandparents are no longer with us. But their legacy of living life in a friendly manner with nature still remains. Do we want to revive the legacy? Time is running out fast.